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# United States Patent [19]

# Tagawa

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# [54] DISPLAY-INTEGRATED TYPE TABLET DEVICE HAVING AND IDLE TIME IN ONE DISPLAY IMAGE FRAME TO DETECT COORDINATES AND HAVING DIFFERENT ELECTRODE DENSITIES

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## [30] Foreign Application Priority Data

		6						
Mar.	11,	1993	[JP]	Japan	 5-0	50:	53	9
May	20,	1992	[JP]	Japan	 4-1	21.	25	C

345/103; 178/18, 19

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#### [57] ABSTRACT

There is provided a display-integrated type tablet device which can achieve a high coordinate detection accuracy even when an electrode density of electrodes is greater than a electrode density of the other electrodes in a display panel. A segment electrode scanning clock signal for scanning segment electrodes having an electrode density three times as high as that of common electrodes has a frequency three times as high as a common electrode scanning clock signal. Shift data input to a segment electrode drive circuit has the same pulse width as that of the shift data input to a common electrode drive circuit. As a result, a scanning speed in an x-direction (shift speed of a segment electrode scanning signal) can be made approximately equal to a scanning speed in a y-direction (shift speed of a common electrode scanning signal). Furthermore, the width of the segment electrodes in an active state is made equal to the width of the common electrode. Thus a waveform of a voltage induced at a detection electrode of a detection pen in an x-coordinate detection period and a waveform of a voltage induced in a y-coordinate detection period are made approximately equal to each other to obtain a high coordinate detection accuracy.

### 5 Claims, 23 Drawing Sheets

